4.14 SOCIO-ECONOMIC CONDITIONS

This section identifies potential impacts on the population, housing, and economic development of Ames Research Center and its surrounding areas from each of the five alternatives. This section also proposes mitigation measures to reduce or eliminate identified impacts.

A. Standards of Significance

An alternative for the NASA Ames Development Plan (NADP) would have a significant impact with regard on the socio-economic conditions within Ames Research Center and the areas adjacent to it if it would:

- Create a significant detriment to the local economy.
- Create a significant negative impact on property values in areas adjacent to Ames Research Center.
- Create a cost impact on a local government or school district that amounts to more than 0.5 percent of that jurisdiction's General Fund or Revenue Limit.
- Generate workers who would not be able to find on-site housing representing over one percent of the predicted new households in the identified Housing Impact Area between 2000 and 2015. This would be considered significant due to the presence of a jobs-housing imbalance in the region.
- Contribute to the regional jobs-housing imbalance.
- Create a net negative fiscal impact on surrounding jurisdictions.
- Disproportionately impact minority populations or low income populations.

B. Housing Impacts

1. Employment

The housing impacts analysis begins with an estimation of the number of employees generated by each NADP alternative. The first stage in employment estimation is to determine the total space assigned to the eight major land uses at ARC, as described in Chapter 2. Table 2-12 contains these data, as well as a summary of NRP population, housing, and employment projections. After allocating space to each land use, employment projection factors for each category are developed, as shown in Table 2-3. With two exceptions, the number of square feet per employee is used as the projection factor. The employment factors are applied to their corresponding land use category to project the number of employees by land use.

The major land uses and their corresponding employment projection factors are described in detail in Chapter 2. This analysis assumes 100 percent occupancy for each of the land use categories. Full occupancy represents a conservative approach to estimating impacts. However, as market conditions shift, vacancy rates will vary, changing the number of employees at ARC and most likely resulting in marginally lower impact levels than predicted here.

2. Housing Supply and Residential Population

The next step in calculating NADP's housing impact is to determine the ARC housing supply and the number of ARC residents. These calculations are described in Chapter 2.

3. Project Impacts

The Project Impact is defined as the additional housing demand in the Housing Impact Area (HIA) generated by each NADP alternative. To estimate each alternative's Project Impact, the housing demand and supply generated by the NADP are projected using data from Sections 1 and 2.

To calculate project demand, the number of employees generated by NADP is translated into households by dividing the total employees by the number of

employed residents per household in the Bay Area in 2015 (the NADP buildout year), as projected by ABAG. This process results in the household demand generated by NADP. Household demand for each alternative is shown in Table 4.14-1.

To compare demand and supply, the number of proposed townhome and apartment units in each alternative is subtracted from the household demand, resulting in the number of households that would need to find housing outside of ARC and in the HIA. This additional household demand in the HIA represents the project impact of the NADP at buildout in 2013. It is expressed as a percentage of new households in the HIA between 2000 and 2015, as projected by ABAG. Any additional household demand is considered a negative impact because it aggravates the housing shortage projected over the next 15 years by ABAG and MTC and described in Chapter 3.14.

ABAG projections use the amount of developable land to estimate local employment and housing. ABAG staff report that ARC was not included in its database of developable land in the process of writing Projections 2000. Therefore, any employment generated at ARC is assumed to be in excess ABAG projections.

This methodology uses NADP employment as a base for determining regional housing demand, and excludes students from the analysis. A reasonable estimation of student demand for housing in the HIA is not feasible at this point due to the lack of information on the NADP university partners' educational program. The NADP university partners have expressed their intention to provide programs for approximately 3,000 undergraduate, graduate, continuing education, and extension students. However, they have not determined the specific mix of students. This analysis assumes that continuing education and extension students already reside in the HIA and will not add to the regional demand for housing. Undergraduate and graduate students, however, may relocate to the HIA to attend classes at ARC. This population will therefore add to the housing demand in the HIA, to the extent that their numbers exceed the number of student apartment and dormitories on

site. As the NADP university partners further refine their facility and educational programming plans, a more detailed analysis of housing demand generated by the student population can be conducted. This analysis may be included at the project-level environmental review process to be conducted by the university partners.

a. Alternative 1

Alternative 1 would generate no additional housing impact. The Comprehensive Use Plan Environmental Assessment describes the number of employees under this Alternative.

b. Alternative 2

As shown in Chapter 2, Alternative 2 would generate 13,068 employees. This number of employees would generate demand for approximately 7,182 new households in the Housing Impact Area (Table 4.14-1). This demand represents 5.74 percent of additional households in the Housing Impact Area between 2000 and 2015. Alternative 2 therefore creates a significant project impact in the Housing Impact Area.

c. Alternative 3

As shown in Chapter 2, Alternative 3 would generate 11,047 employees. This number of employees would generate demand for approximately 6,236 new households in the Housing Impact Area (Table 4.14-1). This demand represents 4.98 percent of additional households in the Housing Impact Area between 2000 and 2015. Alternative 3 therefore creates a significant project impact in the Housing Impact Area.

d. Alternative 4

As shown in Chapter 2, Alternative 4 would generate 15,599 employees. This number of employees would generate demand for approximately 8,460 new households in the Housing Impact Area (Table 4.14-1). This demand represents 6.76 percent of additional households in the Housing Impact Area between 2000 and 2015. Alternative 4 therefore creates a significant project impact in the Housing Impact Area.

Table 4.14-1: NASA Research Park Housing Impact - Project Analysis

Alternative	New Employees (a)	New Household Demand (b)	Proposed Townhome/Apt. Units (c)	Additional Household Demand in HIA (d)	% of Total New Households in HIA 2000 - 2015 (e)
Alternative Two	13,068	7,732	550	7,182	5.74%
Alternative Three	11,047	6,536	300	6,236	4.98%
Alternative Four	15,599	9,230	770	8,460	6.76%
Alternative Five	7,222	4,273	750	3,523	2.81%
Mitigated Alternative Five (f)	7,088	4,194	1,120	3,074	2.45%

Notes:
(a) From Table 2-13.
(b) New Household Demand equals New Employees divided by Employed Residents per Household for the Bay Area in 2015: 1.69
(c) From Tables 2-6 to 2-15.
(d) Additional Household Demand in HIA equals New Household Demand less Townhouse/Apartment Units.
HIA = Housing Impact Area, as defined by Table 3.14-8: Definition of Housing Impact Area.
(e) Total New Households in HIA = 125,232 From Table 3.14-10: Housing Impact Area Characteristics.
(f) Impacts resulting from application of Mitigation SOCIO 1-B. See Chapter Five for additional detail on this alternative.

Sources: NASA Research Park Planning Team; Metropolitan Transportation Commission, *Superdistrict and County Summaries of ABAG Projections, 2000*; Association of Bay Area Governments, *Projections 2000*; Bay Area Economics, 2002.

e. Alternative 5

As shown in Chapter 2, Alternative 5 would generate 7,222 employees. This number of employees would generate demand for approximately 3,523 new households in the Housing Impact Area (Table 4.14-1). This demand represents 2.81 percent of additional households in the Housing Impact Area between 2000 and 2015. Alternative 5 therefore creates a significant project impact in the Housing Impact Area. This alternative generates the smallest housing project impact among Alternatives 2 through 5.

f. Mitigated Alternative 5

Alternative 5, with Mitigation Measure SOCIO-1b applied, would generate 7,088 employees. This number of employees would generate demand for approximately 3,074 new households in the Housing Impact Area (Table 4.14-1). Taking into account the additional units added under SOCIO-1b, this demand represents 2.45 percent of additional households in the Housing Impact Area between 2000 and 2015. Alternative 5 therefore creates a significant project impact in the Housing Impact Area. This alternative generates a smaller impact than the unmitigated Alternative 5.

4. Cumulative Impacts

In addition to the impacts on housing supply in the Housing Area that would be caused by the NADP alternatives, additional cumulative impacts would be caused by other employment-generating projects in the region. Chapter 2 lists the projects in Sunnyvale and Mountain View that combine to create this impact.

To assess the cumulative impact of the NADP alternatives on regional housing supply, this analysis uses ABAG's projections of new households and housing units between 2000 and 2015. Cumulative demand is calculated by adding the households generated by the NADP to the households generated by baseline projects and the additional Bay Area households between 2000 and 2015. This figure is compared to the "unconstrained unit potential" as projected by ABAG between 2000 and 2015. The cumulative impact analysis is contained in Table

Table 4.14-2: NASA Research Park Housing Impact - Cumulative Analysis

Alternative	Additional Household Demand in HIA (a)	Cumulative Household Demand (b)	Unconstrained Unit Potential (c)	Jobs-Housing Balance (d)
Alternative Two	7,182	324,169	308,800	(15,369)
Alternative Three	6,236	323,224	308,800	(14,424)
Alternative Four	8,460	325,447	308,800	(16,647)
Alternative Five	3,523	320,510	308,800	(11,710)
Mitigated Alternative Five (e)	3,074	320,061	308,800	(11,261)

Notes:
(a) From Table 4.14-1.
(b) Cumulative Household Demand is sum of ABAG's projected additional Bay Area households between 2000 and 2015, Additional Household Demand from NADP, and households generated by Lab Project Employment as stated in the memo dated 9/12/00 from DC&E to NAS
(c) Unconstrained Unit Potential is the number of units calculated by ABAG that may be built in the Bay Area between 2000 and 2015 based on available land supply and local land use policies.
(d) Jobs-Housing Balance is difference between Unconstrained Unit Potential and Cumulative Household Demand. Note that this figure represents the *cumulative* jobs-housing imbalance, including all projected regional growth through 2015, not just growth due
(e) Impacts resulting from application of Mitigation SOCIO 1-B. See Chapter Five for additional detail on this alternative.

Sources: DC&E; Association of Bay Area Governments, *Projections 2000; Metropolitan Transportation Commission, Commuter Forecasts for the San francisco Bay Area: 1990-2020;* Bay Area Economics, 2002.

4.14-2. In this analysis, any increase in unmet housing demand is considered to be a significant impact because it would exacerbate the projected housing shortage described in Chapter 3.14.

a. Alternative 2

As shown in Table 4.14-2, Alternative 2 is part of a cumulative household demand for 324,169 Bay Area units between 2000 and 2015. As ABAG only projects a supply of 308,800 units over the next twenty years, a lack of 15,369 units is projected. This cumulative jobs-housing imbalance would represent a significant impact.

b. Alternative 3

As shown in Table 4.14-2, Alternative 3 is part of a cumulative household demand for 323,224 Bay Area units between 2000 and 2015. As ABAG only projects a supply of 308,800 units over the next twenty years, a lack of 14,424 units is projected. This cumulative jobs-housing imbalance would represent a significant impact.

c. Alternative 4

As shown in Table 4.14-2, Alternative 4 is part of a cumulative household demand for 325,447 Bay Area units between 2000 and 2015. As ABAG only projects a supply of 308,800 units over the next twenty years, a lack of 16,647 units is projected. This cumulative jobs-housing imbalance would represent a significant impact.

d. Alternative 5

As shown in Table 4.14-2, Alternative 5 is part of a cumulative household demand for 320,510 Bay Area units between 2000 and 2015. As ABAG only projects a supply of 308,800 units over the next twenty years, a lack of 11,710 units is projected. This cumulative jobs-housing imbalance would represent a significant impact. However, it is the smallest impact among Alternatives 2 through 5.

e. Mitigated Alternative 5

As shown in Table 4.14-2, the mitigated Alternative 5 is part of a cumulative household demand for 320,061 Bay Area units between 2000 and 2015. As ABAG only projects a supply of 308,800 units over the next twenty years, a lack of 11,261 units is projected. This cumulative jobs-housing imbalance would represent a significant impact. However, it is a smaller impact than the unmitigated Alternative 5.

C. Fiscal Impacts

This section outlines the methodology of calculating the increased costs and revenues to the City of Mountain View, Santa Clara County, the Mountain View School District, and the Mountain View-Los Altos Union High School District.

The City of Sunnyvale would not incur any significant fiscal impacts because no significant new development would occur on the portions of ARC within the Sunnyvale city limits. The only impacts would be in regard to sewage treatment, which is addressed separately in this section.

This section also contains estimates of fiscal impacts to each of the jurisdictions associated with Alternatives 2 through 5. The fiscal impacts are summarized in Table 4.14-3.

Alternative 1, the "no action" alternative, has no fiscal impact on the surrounding jurisdictions, and is therefore excluded from this analysis.

1. City of Mountain View

This section documents the fiscal impacts on the City of Mountain View.

Table 4.14-3: Annual Fiscal Impacts Summary

	Alternative Two	Alternative Three	Alternative Four	Alternative Five	Mitigated Alternative Five (a)
INCREASED REVENUES					
City of Mountain View					
Sales and Use Tax	$342,481	$84,452	$641,436	$146,994	$321,383
Utility Users Tax	$55,782	$0	$157,864	$76,111	$113,659
Construction Tax (b)	$98,750	$0	$204,450	$56,250	$87,840
Gas Tax	$4,408	$0	$9,697	$13,224	$19,747
Motor Vehicle In-Lieu Fees	$35,932	$0	$79,050	$107,795	$160,974
Total	**$438,603**	**$84,452**	**$888,047**	**$344,123**	**$615,762**
Santa Clara County					
Sales and Use Tax	$289,864	$398,737	$240,847	$274,026	$274,026
Motor Vehicle In-Lieu Fees	$152,997	$96,366	$196,391	$213,832	$371,889
Transient Occupancy Tax	$317,633	$397,041	$293,811	$397,041	$397,041
Total	**$760,494**	**$892,145**	**$731,049**	**$884,900**	**$1,042,957**
Mountain View-Whisman School District					
Developer Impact Fees (b)	$541,000	$0	$1,169,400	$1,233,000	$1,702,910
Federal Impact Aid	$42,747	$23,316	$59,910	$58,291	$87,048
Revenue Limit Funds	$347,165	$189,362	$486,556	$473,406	$706,953
Total	**$389,911**	**$212,679**	**$546,467**	**$531,697**	**$794,002**
Mountain View-Los Altos Union High School District					
Developer Impact Fees (b)	$304,000	$0	$652,800	$622,000	$845,240
Federal Impact Aid	$3,252	$1,774	$4,557	$4,434	$6,622
State Basic Aid	$2,376	$1,296	$3,330	$3,240	$4,838
Total	**$5,628**	**$3,070**	**$7,887**	**$7,674**	**$11,460**
Subtotal - Revenues	**$1,594,636**	**$1,192,346**	**$2,173,450**	**$1,768,394**	**$2,464,181**
INCREASED EXPENDITURES					
City of Mountain View					
Recreational Program Costs	$176,973	$111,468	$227,168	$247,341	$430,168
Santa Clara County	$0	$0	$0	$0	$0
Mountain View-Whisman School District	$395,054	$215,484	$553,674	$538,710	$804,473
Mountain View-Los Altos Union High School District	$163,368	$89,110	$228,963	$222,775	$332,677
Subtotal - Net Expenditures	**$735,395**	**$416,062**	**$1,009,805**	**$1,008,826**	**$1,567,319**
NET FISCAL (DEFICIT)/SURPLUS					
City of Mountain View	**$261,630**	**($27,016)**	**$660,879**	**$96,781**	**$185,594**
Santa Clara County	**$760,494**	**$892,145**	**$731,049**	**$884,900**	**$1,042,957**
Mountain View -Whisman School District (b)	**($5,142)**	**($2,805)**	**($7,207)**	**($7,012)**	**($10,471)**
Mountain View-Los Altos Union High School District (c)	**($157,741)**	**($86,040)**	**($221,076)**	**($215,101)**	**($321,217)**
Total Fiscal (Deficit)/Surplus	**$859,241**	**$776,284**	**$1,163,645**	**$759,568**	**$896,862**

Notes:
(a) Impacts resulting from application of Mitigation SOCIO 1-B. See Chapter Five for additional detail on this alternative.
(b) One-time revenue excluded from all totals.

Source: Bay Area Economics, 2002.

a. Revenues

The development of NRP would generate revenues for the City of Mountain View primarily through sales and use tax, utility users tax, construction tax, gas tax, and motor vehicle in-lieu fees.

The City of Mountain View also receives revenue from property taxes, a real property conveyance tax, a local business license tax, and a transient occupancy tax. However, these taxes will not likely apply to ARC. Although personal property taxes may be levied on private property in areas under proprietary interest, such as the portions of ARC within the City of Mountain View limits, NASA intends to have a not-for-profit entity, such as a non-profit developer, the University of California, Carnegie Mellon University (a private non-profit institution), or San Jose State University (the NRP partner universities), develop the site. Not-for-profit entities would be exempt from property tax. Property and possessory interest taxes may apply to these non-profit parties should they enter into leasehold agreements with for-profit entities on a portion of the site. To be conservative, however, it is assumed that these taxes would not apply to development under the NADP.

Real property conveyance taxes do not apply because no transfer of property would be taking place at ARC; NRP partners and tenants would operate on ground leases and sublease agreements. The remaining taxes do not apply because no businesses or transient lodging uses would be developed on the portion of ARC under proprietary jurisdiction of and within the City of Mountain View's limits. The revenue impact is calculated based on the sales, population, and development occurring in the Bay View area. This is the only portion of the ARC that lies within Mountain View's city limits.

The following sections describe the assumptions underlying the revenue projections for each of the relevant revenue sources.

i. Sales and Use Taxes

Sales and use tax is collected and distributed by the State Board of Equalization. The current sales tax rate in Santa Clara County is 8.25 percent. The

jurisdictions receiving a share of the sales and use tax levy include the State of California (6 percent), the County Transit District (0.5 percent), the City of Mountain View General Fund (1 percent), and Santa Clara County through Measure B and County funds (0.75 percent).

The City of Mountain View's share of taxable sales includes retail sales occurring off ARC, in Mountain View, and taxable sales occurring in Bay View. The City would not gain revenue from taxable sales occurring in the unincorporated portions of ARC.

The sales taxes in this analysis are generated from resident, employee, and business-to-business expenditures. Resident expenditures are estimated by applying the 1999 (latest year available) per capita taxable sales expenditures for the City of Mountain View to the number of NRP residents. Employee expenditures are estimated by assuming $7.50 in daily expenditures per employee, and 240 work days a year. These figures are compared to the potential taxable sales of on-site retail outlets. Potential on-site retail sales are estimated using the median sales per gross square foot for neighborhood shopping centers in the Western United States. Projected resident and employee sales in excess of the on-site sales potential are assumed to take place in the City of Mountain View.

Business-to-business taxable sales are estimated using a factor developed from the annual taxable sales per square foot for office/R&D firms in the Moffett Park area of Sunnyvale. Moffett Park contains a number of high technology/R&D firms which serve as comparables for NRP partner firms. The taxable sales per square foot is multiplied by the square footage dedicated to office/R&D uses at NRP to project taxable sales generated by NRP partners.

Sales tax estimates for the City of Mountain View are contained in Table 4.14-4.

Alternative 2 is projected to generate approximately $342,481 in annual sales and use tax revenue for the City of Mountain View.

Table 4.14-4: Sales Tax Revenue Estimates

Estimated Resident-Generated Local Taxable Sales

1999 Mountain View Taxable Retail Sales	$863,201,000
Current Mountain View population	76,400
1999-2000 Estimated Per Capita Mountain View Resident Taxable Expenditures	$11,298
Less estimated resident taxable transactions outside Mountain View: 25%	$2,825
Estimated Annual Local Per Capita Expenditures (1999-00)	**$8,474**

Estimated Employee-Generated Local Taxable Sales

Estimated Work Days Per Employee/Year	240
Estimated Average Daily Expenditures	$7.50
Estimated Annual Per-Employee Expenditures (1999-00)	**$1,800**

Estimated On-Site Taxable Retail Sales

Estimated Taxable Retail Sales Per Square Foot of Retail Space	**$296.23**

Estimated On-Site Taxable Business-to-Business Sales

Estimated Taxable Business-to-Business Sales Per Square Foot of Office/R&D/Industrial Space (a)	**$13.48**

ESTIMATED IMPACTS (b)	**Alternative Two**	**Alternative Three**	**Alternative Four**	**Alternative Five**	**Mitigated Alternative Five (j)**
Resident Expenditures	$17,112,903	$10,778,714	$21,966,644	$23,917,390	$41,596,346
Employee Expenditures	$23,521,743	$19,883,753	$28,078,760	$12,999,212	$12,759,212
Retail Taxable Sales	$14,811,500	$22,217,250	$10,368,050	$22,217,250	$22,217,250
Business-to-Business Taxable Sales (c)	$32,261,994	$30,947,694	$46,211,098	$14,319,602	$14,319,602
On-site taxable sales (d)	$47,073,494	$53,164,944	$56,579,148	$36,536,852	$36,536,852
On-site taxable sales in Mountain View city limits (e)	$8,425,000	$0	$24,466,200	$0	$0
On-site taxable sales in unincorporated areas (f)	$38,648,494	$53,164,944	$32,112,948	$36,536,852	$36,536,852
Off-site taxable sales in Mountain View (g)	$25,823,146	$8,445,217	$39,677,353	$14,699,352	$32,138,308
City of Mountain View Percentage of Sales Tax Revenue (h)	**$342,481**	**$84,452**	**$641,436**	**$146,994**	**$321,383**
Santa Clara County Percentage of Sales Tax Revenue (i)	**$289,864**	**$398,737**	**$240,847**	**$274,026**	**$274,026**

Notes:
(a) Figure is the taxable sales per square foot for Office/R&D uses in Sunnyvale's Moffett Park in 2000.
(b) Annual sales tax revenue calculated at buildout.
(c) Assumes 25 percent of University office space will generate sales tax.
(d) Includes Retail Taxable Sales and Business-to-Business Taxable Sales.
(e) Includes Business-to-Business Taxable Sales occurring in the Bay View.
(f) The difference between (d) and (e).
(g) Includes the sum of Employee Expenditures and Resident Expenditures, less on-site Retail Taxable Sales.
(h) Includes 1% of on-site taxable sales in Mountain View city limits and 1% of off site taxable sales.
(i) Includes .75% of on-site taxable sales in unincorporated areas. Insignificant resident and employee expenditures are expected to occur in unincorporated areas outside of NRP.
(j) Impacts resulting from application of Mitigation SOCIO 1-B. See Chapter Five for additional detail on this alternative.

Sources: California State Board of Equalization; Lloyd DeLLamas, HdL; *Dollars and Cents of Shopping Centers: 2000*; Bay Area Economics, 2002.

Alternative 3 is projected to generate approximately $84,452 in annual sales and use tax revenue.

Alternative 4 is projected to generate approximately $631,436 in annual sales and use tax revenue.

Alternative 5 is projected to generate approximately $146,994 in annual sales and use tax revenue.

Mitigated Alternative 5, with the application of measure SOCIO-1b, is projected to approximately $321,383 in annual sales and use tax revenue.

ii. Utility Users Tax

The City of Mountain View levies a 3 percent tax on the sale of utilities. This tax would apply to residential and commercial uses in the portion of Bay View within the city limits of Mountain View. The utility users tax revenue generated by NRP is projected by applying Mountain View's current per capita utility users tax revenue to the projected NRP service population. The current per capita revenue is the City's current utility users tax revenue divided by the existing service population. The existing service population includes the City's residential population, plus 50 percent of total employment. This methodology is a common standard for estimating the service population, given that employees typically consume utilities at approximately half the rate of residents. Note that this methodology only generates a preliminary estimate of utility users tax revenue, as the commercial utility consumption will vary with industry and use. Utility users tax estimates are contained in Table 4.14-5.

Alternative 2 is projected to generate approximately $55,782 in annual utility users tax revenue for the City of Mountain View.

Alternative 3 is not projected to generate any additional utility users tax revenue.

Table 4.14-5: Utility Users Tax Revenue

Current Mountain View Utility Users Tax Revenues	
Current Mountain View Revenues (1999-2000)	$3,901,073
Current Population	76,400
50 Percent of Current Employment	38,540
Total Service Population	114,940
Current Per Capita Revenues	$33.94

ESTIMATED IMPACTS (a)	Alternative Two	Alternative Three	Alternative Four	Alternative Five	Mitigated Alternative Five (b)
Service Population (b)	1,644	0	4,651	2,243	3,349
TOTAL ANNUAL INCREASED REVENUES TO CITY	**$55,782**	**$0**	**$157,864**	**$76,111**	**$113,659**

Notes:
(a) Annual utility users tax revenue calculated at buildout.
(b) Impacts resulting from application of Mitigation SOCIO 1-B. See Chapter Five for additional detail on this alternative.
(c) Includes Bay View resident population plus one half of Bay View employee population.

Sources: City of Mountain View Finance Department; Association of Bay Area Governments, *Projections, 2000* ; Bay Area Economics, 2002.

Alternative 4 is projected to generate approximately $157,864 in annual utility users tax revenue.

Alternative 5 is projected to generate approximately $76,111 in annual utility users tax revenue.

Mitigated Alternative 5, with the application of measure SOCIO-1b, is projected to generate approximately $113,659 in annual utility users tax revenue.

iii. Construction Tax

The City of Mountain View levies a construction tax on new construction within the city limits. The tax is $0.08 per square foot on commercial developments, and $75 per unit for residential developments containing at least twenty or more units. This analysis calculates the construction tax assessed on development in Bay View. Construction tax estimates are contained in Table 4.14-6.

Alternative 2 is projected to generate approximately $98,750 in construction tax revenue for the City of Mountain View.

Alternative 3 is not projected to generate any additional construction tax revenue.

Alternative 4 is projected to generate approximately $204,450 in construction tax revenue.

Alternative 5 is projected to generate approximately $56,250 in construction tax revenue.

Mitigated Alternative 5, with the application of measure SOCIO-1b, is projected to generate approximately $87,840 in construction tax revenue.

Table 4.14-6: Construction Tax Revenue Estimates

CONSTRUCTION TAX RATE

For Residential Developments	$75	per unit
For Non-Residential Uses	$0.08	per sqft

APPLICABLE SPACE (a)	**Alternative Two**	**Alternative Three**	**Alternative Four**	**Alternative Five**
Residential Units	250	0	550	1,120
Non-Residential Space (sqft)	1,000,000	0	2,040,000	48,000

ESTIMATED TAXES GENERATED (b)	**Alternative Two**	**Alternative Three**	**Alternative Four**	**Alternative Five**
Residential Construction Tax	$18,750	$0	$41,250	$84,000
Non-Residential Construction Tax	$80,000	$0	$163,200	$3,840
Total Estimated Construction Tax (b)	**$98,750**	**$0**	**$204,450**	**$87,840**

Notes:
(a) Includes residential and non-residential uses in the Bay View area of NRP, located in the City of Mountain View.
(b) Construction tax revenue calculated at buildout.

Sources: City of Mountain View Finance Department; Bay Area Economics, 2001.

iv. Gas Tax

The City of Mountain View maintains a Gas Tax Fund, which is required by state law to account for gas taxes collected and allocated by the State. These taxes are levied on gasoline and other motor fuels in terms of cents per gallon, and then distributed to the State, cities, and counties on a formula based on population. Gas Tax funds are spent on maintenance and capital related to public streets and highways.

This analysis estimates the increased Gas Tax Revenue by determining the City of Mountain View's current per capita gas tax allocations, and multiplying this factor by the projected resident population of Bay View. Gas tax estimates are contained in Table 4.14-7.

Alternative 2 is projected to generate approximately $4,408 in annual gas tax revenue for the City of Mountain View.

Alternative 3 is not projected to generate any additional gas tax revenue.

Alternative 4 is projected to generate approximately $9,697 in annual gas tax revenue.

Alternative 5 is projected to generate approximately $13,224 in annual gas tax revenue.

Mitigated Alternative 5, with the application of measure SOCIO-1b, is projected to generate approximately $19,747 in annual gas tax revenue.

v. Motor Vehicle In-Lieu Fees

Instead of imposing a property tax on motor vehicles, the State imposes an "in-lieu" fee on vehicle registrations. The in-lieu fee is equal to two percent of the vehicle value. The State collects these fees with annual vehicle registration fees, and allocates a portion back to local governments based on the size of the local resident population. To estimate future revenues, this analysis applies Mountain View's current per-capita Motor Vehicle In-Lieu Fee revenue to the

Table 4.14-7: Gas Tax Revenue Estimates

Current Gas Tax Revenues

Current Revenues (1999-2000)	$450,515
Current Population of Mountain View	76,400
Current Per Capita Revenues	$5.90

ESTIMATED IMPACTS (a)	Alternative Two	Alternative Three	Alternative Four	Alternative Five	Mitigated Alternative Five (b)
New Residents (c)	748	0	1,645	2,243	3,349
TOTAL INCREASED REVENUES	**$4,408**	**$0**	**$9,697**	**$13,224**	**$19,747**

Notes:
(a) Annual gas tax revenue calculated at buildout.
(b) Impacts resulting from application of Mitigation SOCIO 1-B. See Chapter Five for additional detail on this alternative.
(c) Includes Bay View residents.

Sources: City of Mountain View Fiscal Year 2000-2001 Proposed Budget; Association of Bay Area Governments, *Projections 2000*; Bay Area Economics, 2002.

projected resident population of Bay View. Estimates of motor vehicle in-lieu fees are contained in Table 4.14-8.

Alternative 2 is projected to generate approximately $35,932 in annual Motor Vehicle In-Lieu Fees for the City of Mountain View.

Alternative 3 is not projected to generate any additional Motor Vehicle In-Lieu Fees.

Alternative 4 is projected to generate approximately $79,050 in annual Motor Vehicle In-Lieu Fees.

Alternative 5 is projected to generate approximately $107,795 in annual Motor Vehicle In-Lieu Fees.

Mitigated Alternative 5, with the application of measure SOCIO-1b, is projected to generate approximately $160,974 in annual Motor Vehicle In-Lieu Fees.

b. Costs

This section contains information regarding the cost impacts of development under the NADP on the City of Mountain View to provide basic services required by the NADP. Services covered in this section include police, fire, water, sewer, storm water, and recreational facilities.

i. Police

The proposed project is not expected to create significant fiscal impacts for the City of Mountain View with regard to police protection requirements. Currently, NASA is responsible for police protection and security at ARC facilities, which it contracts out to a private company. NASA intends to maintain this system in the future. Implementation of the NADP would not require regular patrols by the City of Mountain View Police Department or by other jurisdictions' police departments.

Table 4.14-8: Motor Vehicle In-Lieu Fees Revenue Estimate

Current Motor Vehicle In-Lieu Fee Revenues

City of Mountain View	
Current Mountain View Revenues (1999-2000)	$3,672,475
Current Population	76,400
Current Per Capita Revenues	$48.07
Santa Clara County	
Current Santa Clara County Revenues (FY 2000)	$132,981,000
Current Population	1,755,300
Current Per Capita Revenues	$75.76

ESTIMATED IMPACTS (a)	Alternative Two	Alternative Three	Alternative Four	Alternative Five	Mitigated Alternative Five (b)
New Mountain View Residents (c)	748	-	1,645	2,243	3,349
New Santa Clara County Residents	2,020	1,272	2,592	2,823	4,909
TOTAL INCREASED REVENUES TO MOUNTAIN VIEW	**$35,932**	**$0**	**$79,050**	**$107,795**	**$160,974**
TOTAL INCREASED REVENUES TO SANTA CLARA CO.	**$152,997**	**$96,366**	**$196,391**	**$213,832**	**$371,889**

Notes:
(a) Annual motor vehicle license fees revenue calculated at buildout.
(b) Impacts resulting from application of Mitigation SOCIO 1-B. See Chapter Five for additional detail on this alternative.
(c) Includes Bay View residents.

Sources: Santa Clara County, Fiscal Year 2001 Recommended Budget; Association of Bay Area Governments, *Projections 2000*; City of Mountain View Finance Department; Bay Area Economics, 2002.

ii. Fire

The proposed project is not expected to create significant fiscal impacts for the City of Mountain View with regard to fire protection requirements. Fire protection services at ARC facilities are currently provided by the California Air National Guard (CANG). The department's personnel and equipment are located on-site at the ARC. NASA intends to maintain this fire protection system in the future, and ARC would not require fire protection services from the City of Mountain View or other local jurisdictions. NASA's fire protection service also provides emergency medical services. ARC is part of the Santa Clara County Fire Mutual Aid service, and thus has a cooperative response agreement with all of the city fire departments in Santa Clara County. This agreement is described in Section 3.6. Due to the mutually beneficial nature of this agreement the costs are assumed to be negligible.

iii. Water

The infrastructure impact analysis (Section 4.5) identifies few improvements needed to off-site water infrastructure. NASA will fund all improvements needed to supply the NADP development, mitigating any capital expense impacts to the City of Mountain View. Water service providers set their rate structure to assure that services are fully paid for by users. Therefore, no on-going net fiscal impact is anticipated.

iv. Sewer

Per mitigation measure INFRA-2, NASA and its partners would mitigate their fair share of the capital expense impacts to the Mountain View sewer conveyance and treatment system. On an on-going basis, sewer service providers set their rate structure to assure that services are fully paid for by users. Therefore, no on-going net fiscal impact is anticipated.

v. Stormwater

NASA and its partners will fully bear the capital expense of upgrading the on-site drainage system. No net fiscal impact is anticipated.

vi. Recreational and Library Facilities

The City of Mountain View may incur costs from ARC residents that use the City's recreational facilities and programs, as well as its libraries. This analysis estimates ARC's cost impact on the City's recreational and library services by applying the City of Mountain View's current per capita recreational program expenditures to the projected ARC resident population under each alternative. This analysis is contained in Table 4.14-9.

Alternative 2 is projected to generate approximately $176,973 in annual Recreational Program costs to the City of Mountain View.

Alternative 3 is projected to generate approximately $111,468 in annual Recreational Program costs.

Alternative 4 is projected to generate approximately $227,168 in annual Recreational Program costs.

Alternative 5 is projected to generate approximately $247,341 in annual Recreational Program costs.

Mitigated Alternative 5, with the application of measure SOCIO-1b, is projected to generate approximately $430,168 in annual Recreational Program costs.

c. Conclusions

As shown in Table 4.14-3, Alternative 2 is projected to generate an annual revenue impact of approximately $438,603 and an annual cost impact of approximately $176,973 creating a net fiscal surplus of $261,630. No adverse impact would occur.

As shown in Table 4.14-3, Alternative 3 is projected to generate an annual revenue impact of approximately $84,452 and an annual cost impact of approximately $111,468, creating a net fiscal deficit of $27,016. This deficit would represent a significant impact.

Table 4.14-9: Recreational Program Fiscal Impacts

Current Recreational Program Costs	
2000-2001 City of Mountain View Recreation and LIbrary Expenditures	$6,695,089
Current Population	76,400
Current Per Capita Expenditures	$87.63

ESTIMATED IMPACTS (a)	**Alternative Two**	**Alternative Three**	**Alternative Four**	**Alternative Five**	**Mitigated Alternative Five (b)**
New Residents (c)	2,020	1,272	2,592	2,823	4,909
TOTAL INCREASED COSTS	**$176,973**	**$111,468**	**$227,168**	**$247,341**	**$430,168**

Notes:
(a) Annual impacts calculated at buildout.
(b) Impacts resulting from application of Mitigation SOCIO 1-B. See Chapter Five for additional detail on this alternative.
(c) Includes all NADP residents.

Sources: City of Mountain View Fiscal Year 2000-2001 Proposed Budget; Association of Bay Area Governments, *Projections 2000*; Bay Area Economics, 2002.

As shown in Table 4.14-3, Alternative 4 is projected to generate an annual revenue impact of approximately $888,047 and an annual cost impact of approximately $227,168, creating a net fiscal surplus of $660,879. No adverse impact would occur.

As shown in Table 4.14-3, Alternative 5 is projected to generate an annual revenue impact of approximately $344,123 and an annual cost impact of approximately $247,341, creating a net fiscal surplus of $96,781. No adverse impact would occur.

As shown in Table 4.14-3, mitigated Alternative 5, with the application of measure SOCIO-1b, is projected to generate an annual revenue impact of approximately $615,762 and an annual cost impact of approximately $430,168 creating a net fiscal surplus of $185,594. No adverse impact would occur.

2. Santa Clara County

This section documents the fiscal impacts on Santa Clara County.

a. Revenues

i. Sales and Use Taxes

As discussed above, the County receives 0.75 of the 8.25 cent State sales tax. The County would receive sales and use tax on the retail and office space located in the unincorporated portion of ARC. Table 4.14-4 contains sales and use tax estimates for Santa Clara County.

Alternative 2 is projected to generate approximately $289,864 in annual sales and use tax revenue for Santa Clara County.

Alternative 3 is projected to generate approximately $398,737 in annual sales and use tax revenue.

Alternative 4 is projected to generate approximately $240,847 in annual sales and use tax revenue.

Alternative 5 is projected to generate approximately $274,026 in annual sales and use tax revenue.

Mitigated Alternative 5, with the application of measure SOCIO-1b, is projected to generate approximately $274,026 in annual sales and use tax revenue.

ii. Motor Vehicle In Lieu Fees

An analogous procedure was used to calculate the County's share of motor vehicle in-lieu fees as for the City of Mountain View. The County's current per capita Motor Vehicle In-Lieu Fee revenue is applied to the NRP residential population. Table 4.14-8 contains Motor Vehicle In-Lieu Fee projections for Santa Clara County.

Alternative 2 is projected to generate approximately $152,997 in annual Motor Vehicle In-Lieu Fees for Santa Clara County.

Alternative 3 is projected to generate approximately $96,366 in annual Motor Vehicle In-Lieu Fees.

Alternative 4 is projected to generate approximately $196,391 in annual Motor Vehicle In-Lieu Fees.

Alternative 5 is projected to generate approximately $213,832 in annual Motor Vehicle In-Lieu Fees.

Mitigated Alternative 5, with the application of measure SOCIO-1b, is projected to generate approximately $371,889 in annual Motor Vehicle In-Lieu Fees.

iii. Transient Occupancy Tax

The County levies an 8 percent transient occupancy tax (TOT) on lodging facilities in unincorporated areas. The proposed NRP conference center would be subject to this tax. TOT is calculated by determining the current per room

TOT revenue in Santa Clara County and applying this figure to the number of rooms at the NRP conference center. When calculating the current per room TOT revenue in the County, recreational vehicle parks were excluded due to their unusual occupancy rates and rate structure. Table 4.14-10 contains TOT estimates for Santa Clara County.

Alternative 2 is projected to generate approximately $317,633 in annual transient occupancy tax revenue for Santa Clara County.

Alternative 3 is projected to generate approximately $397,041 in annual transient occupancy tax revenue for Santa Clara County.

Alternative 4 is projected to generate approximately $293,811 in annual transient occupancy tax revenue.

Alternative 5 is projected to generate approximately $397,041 in annual transient occupancy tax revenue.

Mitigated Alternative 5, with the application of measure SOCIO-1b, is projected to generate approximately $397,041 in annual transient occupancy tax revenue.

b. Costs

As stated above, ARC maintains its own fire, EMS, and police services, and is not expected to create a fiscal impact on the County in terms of public safety. ARC does maintain mutual aid agreements with surrounding jurisdictions, but due to its mutually beneficial nature, its costs are considered to be negligible. No other cost impacts to the County are anticipated from any of the alternatives.

c. Conclusions

Alternative 2 is projected to generate an annual net revenue increase of $760,494 for Santa Clara County. No adverse impact would occur.

Table 4.14-10: Transient Occupancy Tax Revenue Estimates

Current Santa Clara County Transient Occupancy Tax Revenues

Current Revenues (FY 2000)	$268,400
Total Unincorporated Santa Clara County Lodging Rooms	169
Current Per Existing Hotel/Motel Room Transient Occupancy Tax Revenue	$1,588

ESTIMATED IMPACTS (a)	Alternative Two	Alternative Three	Alternative Four	Alternative Five	Mitigated Alternative Five (b)
New Rooms	200	250	185	250	250
TOTAL INCREASED REVENUES	**$317,633**	**$397,041**	**$293,811**	**$397,041**	**$397,041**

Notes:
(a) Annual transient occupancy tax revenue calculated at buildout.
(b) Impacts resulting from application of Mitigation SOCIO 1-B. No change is expected in mitiagetd Alternative Five. See Chapter Five for additional detail on this alternative.

Source: Santa Clara County, *Fiscal Year 2001 Recommended Budget*; Santa Clara County Department of Revenue; Bay Area Economics, 2002.

Alternative 3 is projected to generate an annual net revenue increase of $892,145. No adverse impact would occur.

Alternative 4 is projected to generate an annual net revenue increase of $731,049. No adverse impact would occur.

Alternative 5 is projected to generate an annual net revenue increase of $884,900. No adverse impact would occur.

Mitigated Alternative 5, with the application of measure SOCIO-1b, is projected to generate an annual net revenue increase of $1,042,957. No adverse impact would occur.

3. Mountain View-Whisman School District

This section documents the fiscal impacts on the Mountain View-Whisman School District.

a. Revenues

Student forecasts used for this analysis are contained in Table 4.14-11. Projections were developed using student generation ratios from the *Mountain View Elementary School District Development Impact Fee Justification Study*.[1]

i. Revenues

Student forecasts used for this analysis are contained in Table 4.14-11. Projections were developed using student generation ratios from the *Mountain View Elementary School District Development Impact Fee Justification Study*.[2]

[1] Schoolhouse Services. *Mountain View Elementary School District Development Impact Fee Justification Study*, April 27, 1999.

[2] Schoolhouse Services. *Mountain View Elementary School District Development Impact Fee Justification Study*, April 27, 1999.

Table 4.14-11: NASA Research Park Student Generation Estimates

STUDENT GENERATION

School District	Student Generation Ratio (per unit) (a)	Alternative Two		Alternative Three		Alternative Four		Alternative Five		Mitigated Alternative Five (b)	
		Units	Students	Units	Students	Units	Students	Units	Students	Units	Students
Mtn View-Whisman District											
Grades K-3	0.066	550	36	300	20	771	51	750	50	1,120	74
Grades 4-5	0.029	550	16	300	9	771	22	750	22	1,120	32
Grades 6-8	0.037	550	20	300	11	771	29	750	28	1,120	41
Total Elementary			**73**		**40**		**102**		**99**		**148**
Mtn View-Los Altos High	0.036	550	**20**	300	**11**	771	**28**	750	**27**	1,120	**40**
Total Students			**92**		**50**		**130**		**126**		**188**

Notes:
a) Student Generation Estimates from Mountain View Elementary School District Development Impact Fee Justification Study, April 27, 1999.
(b) Impacts resulting from application of Mitigation SOCIO 1-B. See Chapter Five for additional detail on this alternative.

Sources: Schoolhouse Services; Bay Area Economics, 2002.

Developer Impact Fees

The Mountain View-Whisman School District receives a one-time impact fee of $1.37/square foot for residential developments and $0.13/square foot for office development in the District's boundaries. This fee schedule would be applied to the portion of the ARC within the School District's boundaries and outside of exclusive federal legislative area (i.e. the Bay View portion of the site) to create additional revenue to the district. Table 4.14-12 presents estimates of Developer Impact Fees.

Alternative 2 is projected to generate approximately $541,000 in Developer Impact Fees for the Mountain View-Whisman School District.

Alternative 3 is not projected to generate any additional Developer Impact Fees.[3]

Alternative 4 is projected to generate approximately $1.2 million in Developer Impact Fees.

Alternative 5 is projected to generate approximately $1.2 million in Developer Impact Fees.

Mitigated Alternative 5 is projected to generate approximately $1.7 million in Developer Impact Fees.

ii. Federal Impact Aid

The U.S. Department of Education provides funding to local school districts whose enrollment includes students who live on federal property or who live with a parent who is employed on federal property. These students must comprise at least 3 percent of the overall student body to make the district

[3] Alternative 3 would not generate any fees because it would not include development in the Bay View area, which is within school district boundaries. NRP lands are within an exclusive federal legislative area. No development on these lands would have to pay school impact fees.

eligible for Impact Aid. Impact Aid is intended to compensate the districts for the fact that the federal government does not contribute to the local property tax base.

A district's share of Impact Aid is calculated through a complex process that involves the number of eligible students in the district, the number of total students, and the percentage of the district's budget dedicated to eligible students. This Impact Aid figure varies significantly from year-to-year. Furthermore, the program is subject to Congressional appropriations and changes in the program guidelines. Given these factors, it is difficult to produce reliable forecasts of per-student Impact Aid payments in 2013 (NADP's buildout horizon). The Impact Aid projections in this analysis, therefore, are preliminary estimates.

Future Impact Aid payments are calculated by multiplying the Impact Aid payment per student to the Whisman School District in Fiscal Year 2001 by the number of elementary and middle school students generated by the NADP. The Mountain View District did not apply for Impact Aid funding in Fiscal Year 2001.[4] Table 4.14-12 presents estimates of Impact Aid generation at NADP buildout.

Alternative 2 is projected to generate approximately $42,747 in Federal Impact Aid for the Mountain View-Whisman School District.

Alternative 3 is projected to generate approximately $23,316 in Federal Impact Aid.

Alternative 4 is projected to generate approximately $59,910 in Federal Impact Aid.

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[4] Prior to the 2001-2002 school year, Whisman and Mountain View School Districts were distinct districts. They merged in the 2001-2002 school year due to declining enrollment and other factors.

Table 4.14-12: School District Impact Aid and Developer Fee Estimate

FEDERAL IMPACT AID	Per-student Payments
Mountain View-Whisman School District Federal Impact Aid (a)	$588.80
Mountain View-Los Altos Union High School District Federal Impact Aid (b)	$164.23

DEVELOPER FEES	Non-Residential	Residential
Mountain View-Whisman School District (c) Developer Fee ($/sqft)	$0.13	$1.37
Mountain View-Los Altos Union High School District Developer Fee ($/sqft)	$0.10	$0.68

ESTIMATED ANNUAL REVENUE (d)	Alternative Two	Alternative Three	Alternative Four	Alternative Five	Mitigated Alternative Five (g)
Mountain View-Whisman School District Federal Impact Aid (e)	$42,747	$23,316	$59,910	$58,291	$87,048
Mountain View-Los Altos Union High School Federal Impact Aid (e)	$3,252	$1,774	$4,557	$4,434	$6,622
Total Annual School Revenue	**$45,999**	**$25,090**	**$64,468**	**$62,725**	**$93,670**
ESTIMATED ONE-TIME REVENUE (d)					
Mountain View-Whisman School District Developer Fee (f)	$541,000	$0	$1,169,400	$1,233,000	$1,702,910
Mountain View-Los Altos Union High School District Developer Fee (f)	$304,000	$0	$652,800	$622,000	$845,240
Total One-Time School Revenue	**$845,000**	**$0**	**$1,822,200**	**$1,855,000**	**$2,548,150**

Notes:
(a) Per-student payments are based on Fiscal Year 2001 Impact Aid payments to the pre-merger Whisman School District. The Mountain View School District, prior to the merger, had not applied for aid in recent years.
(b) Per student payments are based on Fiscal Year 2000 Impact Aid payments to the Mountain View-Los Altos Union High School District, the last year the district applied for aid.
(c) The Mountain View-Whisman School District has a series of non-residential fees. The one used here is for office uses.
(d) Revenues calculated at buildout.
(e) Federal Impact Aid revenue is product of student forecasts (see Table 4.14-11) and per-student payments.
(f) Developer Fee Revenues are product of Developer Fees per square foot and square footage of corresponding use in Bay View.
(g) Impacts resulting from application of Mitigation SOCIO 1-B. See Chapter Five for additional detail on this alternative.

Alternative 5 is projected to generate approximately $58,291 in Federal Impact Aid.

Mitigated Alternative 5 is projected to generate approximately $87,048 in Federal Impact Aid.

iii. Revenue Limit

According to the structure of the public school finance system in California, school district revenue limits are established annually by the State Department of Education, based primarily on ADA. The revenue limit is composed of State-provided funding and property tax revenues. If a school district's property tax revenue allocations do not parallel the changes in the revenue limits, the State will adjust its contribution of operating revenues so that the district is funded to a new revenue limit. As enrollment changes at the local level, the amount of money available to the district on a per-student basis remains relatively constant, except for cost of living adjustments.

The additional students generated by the NADP, therefore, would contribute to an increased revenue limit for the Mountain View-Whisman School District. The increase is projected by calculating the current per-student revenue and applying that figure to the additional students generated by the NADP. The process is outlined in Table 4.14-13 and results are contained in Table 4.14-3.

Table 4.14-13 has three sections. The first section shows current per student revenue limit and expenditure data. The second portion determines the per student fiscal impact on the school districts, net of additional revenue limit funds from the state and federal impact aid (from Table 4.14-12). The final section then applies these net per student impacts to the number of students generated by each NADP alternative to determine the total fiscal impact on the school districts.

As shown in Table 4.14-3, Alternative 2 would generate approximately $347,165 in additional revenue limit funds for the District.

Table 4.14-13: School District Net Fiscal Impact Estimate

CURRENT REVENUE

District	2001/02 Revenue Limit	2001/02 Enrollment	Revenue Limit per Student
Mountain View-Whisman	**$20,562,089**	**4,300**	**$4,782**
Mtn View-Los Altos High	**$29,350,899**	**2,794**	**$10,505**

CURRENT EXPENDITURES (a)

District	2001/02 Expenditures	2001/02 Enrollment	Expenditures per Student
Mountain View-Whisman	**$23,398,496**	**4,300**	**$5,442**
Mtn View-Los Altos High	**$23,053,096**	**2,794**	**$8,251**

NET FISCAL IMPACT (PER STUDENT)

Impacts	Mountain View-Whisman District	Mtn View-Los Altos High (b)
Revenue Limit Funds/Basic Aid Amount	$4,782	$120
Federal Impact Aid Revenue	$589	$164
Total New Revenue per Student (c)	**$5,371**	**$284**
New Expenditures per Student	**$5,442**	**$8,251**
Net Impact	**($71)**	**($7,967)**

NET FISCAL IMPACT (TOTAL)

	Alternative Two	Alternative Three	Alternative Four	Alternative Five	Mitigated Alternative Five (d)
Estimated Additional Students					
Mountain View-Whisman District	73	40	102	99	148
Mountain View-Los Altos Union High School District	20	11	28	27	40
New Revenue					
Mountain View-Whisman District	$389,911	$212,679	$546,467	$531,697	$794,002
Mountain View-Los Altos Union High School District	$5,628	$3,070	$7,887	$7,674	$11,460
New Expenditures					
Mountain View-Whisman District	$395,054	$215,484	$553,674	$538,710	$804,473
Mountain View-Los Altos Union High School District	$163,368	$89,110	$228,963	$222,775	$332,677
Net Fiscal Impact Mtn View-Whisman District	**($5,142)**	**($2,805)**	**($7,207)**	**($7,012)**	**($10,471)**
Percent of Annual Revenue Limit	**0.03%**	**0.01%**	**0.04%**	**0.03%**	**0.05%**
Net Fiscal Impact Mtn View-Los Altos High	**($157,741)**	**($86,040)**	**($221,076)**	**($215,101)**	**($321,217)**
Percent of Annual Revenue Limit	**0.54%**	**0.29%**	**0.75%**	**0.73%**	**1.09%**

Notes:
(a) Excludes administrative salaries and benefits, as these costs are not expected to increase significantly with the influx of NRP students.
(b) As Mountain View-Los Altos Union High School District is a State Basic Aid District, it only receives $120 per additional ADA. Any additional increases in revenue limit funds through NADP buildout would come from an increase in local property tax values.
(c) Only includes annual revenue sources. Developer impact fees are one-time fees and are therefore excluded.
(d) Impacts resulting from application of Mitigation SOCIO 1-B. See Chapter Five for additional detail on this alternative.

Source: Mountain View-Whisman School District; Mountain View-Los Altos Union High School District; Bay Area Economics, 2002.

As shown in Table 4.14-3, Alternative 3 would generate approximately $189,362 in additional revenue limit funds.

As shown in Table 4.14-3, Alternative 4 would generate approximately $486,556 in additional revenue limit funds.

As shown in Table 4.14-3, Alternative 5 would generate approximately $473,406 in additional revenue limit funds.

As shown in Table 4.14-3, Mitigated Alternative 5, with the application of measure SOCIO-1b, would generate approximately $706,953 in additional revenue limit funds.

b. Costs

Current per-student expenditures were applied to the number of elementary and middle school students expected to be generated by the NADP alternatives to project additional costs to the District under each alternative. Administrative salaries and benefits were excluded since they would not increase significantly with the limited number of students generated by the alternatives.

Alternative 2 is projected to generate approximately $395,054 in additional costs to the Mountain View School District.

Alternative 3 is projected to generate approximately $215,484 in additional costs.

Alternative 4 is projected to generate approximately $553,674 in additional costs.

Alternative 5 is projected to generate approximately $538,710 in additional costs.

Mitigated Alternative 5 is projected to generate approximately $804,473 in additional costs.

c. Conclusions

Thanks to the revenue limit finance system, the additional students generated by NADP would have an insignificant impact on the Mountain View-Whisman School District's operational budget. The State Department of Education would adjust the District's revenue limit and its State aid to account for the increased number of students. Table 4.14-13 illustrates that per-student expenditures, when combined with the estimated Federal Impact Aid, roughly equal the marginal cost of the additional students. As such, the NADP generates no significant fiscal impact on the Mountain View-Whisman School District.

Alternative 2 is projected to generate a net annual cost impact of $5,142 to the Mountain View School District. This fiscal deficit is only 0.03 percent of the District's annual revenue limit, and therefore does not represent a significant fiscal impact.

Alternative 3 is projected to generate a net annual cost impact of $2,805 to the Mountain View School District. This fiscal deficit is only 0.01 percent of the District's annual revenue limit, and therefore does not represent a significant fiscal impact.

Alternative 4 is projected to generate a net annual cost impact of $7,207 to the Mountain View School District. This fiscal deficit is only 0.04 percent of the District's annual revenue limit, and therefore does not represent a significant fiscal impact.

Alternative 5 is projected to generate a net annual cost impact of $7,012 to the Mountain View School District. This fiscal deficit is only 0.03 percent of the District's annual revenue limit, and therefore does not represent a significant fiscal impact.

Mitigated Alternative 5 is projected to generate a net annual cost impact of $10,471 to the Mountain View School District. This fiscal deficit is only 0.05 percent of the District's annual revenue limit, and therefore does not represent a significant fiscal impact.

4. Mountain View-Los Altos Union High School District

This section documents the fiscal impacts on the Mountain View-Los Altos High School District.

a. Revenues

i. Developer Impact Fees

The Mountain View-Los Altos Union High School District receives an impact fee of $0.68/square foot for residential projects and $0.10/square foot for non-residential projects in the District's boundaries. This fee schedule is applied to the portion of ARC within the school district's boundaries and outside of exclusive federal legislative jurisdiction (i.e. the Bay View portion) to estimate additional revenue to the district.

Alternative 2 is projected to generate approximately $304,000 in Developer Impact Fees for the Mountain View-Los Altos Union High School District.

Alternative 3 is not projected generate any additional Developer Impact Fees.

Alternative 4 is projected to generate approximately $652,800 in Developer Impact Fees.

Alternative 5 is projected to generate approximately $622,000 in Developer Impact Fees.

Mitigated Alternative 5 is projected to generate approximately $845,240 in Developer Impact Fees.

ii. Federal Impact Aid

As stated in Section 3.14, the Mountain View-Los Altos Union High School District has not applied for Federal Impact Aid in recent years and does not anticipate doing so in the foreseeable future. However, the District may decide to apply for aid as a result of the increased students generated by the NADP. The following projections are provided to demonstrate how much additional revenue the District would receive should it decide to submit an application. Again, due to the numerous variables involved in calculating per-student aid payments, these projections should be treated as preliminary estimates.

The per-student payment from Fiscal Year 2000 (the last time the District applied for aid) was applied to the number of high school students generated by NADP.

Alternative 2 is projected to generate approximately $3,252 in Federal Impact Aid for the Mountain View-Los Altos Union High School District.

Alternative 3 is projected to generate approximately $1,774 in Federal Impact Aid.

Alternative 4 is projected to generate approximately $4,557 in Federal Impact Aid.

Alternative 5 is projected to generate approximately $4,434 in Federal Impact Aid.

Mitigated Alternative 5 is projected to generate approximately $6,622 in Federal Impact Aid.

iii. Revenue Limit/State Basic Aid

The Mountain View-Los Altos Union High School District is a State Basic Aid district. As discussed in Section 3.14, State Basic Aid districts' property tax revenues exceed their revenue limit. Consequently, the Mountain View-Los Altos Union High School District does not receive State aid towards its

revenue limit, and only receives a basic aid amount ($120 per ADA or $2,400 per district, whichever is greater) for each student. The District relies on additional property tax increment to maintain its existing per-student revenue limit amount.

The following analysis assumes the District remains a State Basic Aid district, and takes a highly conservative approach by assuming no additional property tax increment. Under these conditions, the District would only receive the basic aid amount for additional students generated by the NADP. The process is outlined in Table 4.14-13 and results are contained in Table 4.14-3.

Alternative 2 would generate an additional $2,376 in basic funds for the Mountain View-Los Altos Union High School District.

Alternative 3 would generate an additional $1,296 in basic aid funds.

Alternative 4 would generate an additional $3,330 in basic aid funds.

Alternative 5 would generate an additional $3,240 in basic aid funds.

Mitigated Alternative 5 would generate an additional $4,838 in basic aid funds.

b. Costs

To estimate additional costs to the Mountain View-Los Altos Union High School District, current per-student expenditures were applied to the number of high school students generated by the NADP.

As with the Mountain View-Whisman District, administrative salaries and benefits were excluded from the per-student expenditures. These costs would not increase significantly with the limited number of students generated by NADP. These calculations are contained in Table 4.14-13.

Alternative 2 is projected to generate approximately $163,368 in additional costs to the Mountain View-Los Altos Union High School District.

Alternative 3 is projected to generate approximately $89,110 in additional costs to the Mountain View-Los Altos Union High School District.

Alternative 4 is projected to generate approximately $228,963 in additional costs to the Mountain View-Los Altos Union High School District.

Alternative 5 is projected to generate approximately $222,775 in additional costs to the Mountain View-Los Altos Union High School District.

Mitigated Alternative 5 is projected to generate approximately $332,677 in additional costs to the Mountain View-Los Altos Union High School District.

c. Conclusions

Alternative 2 is projected to generate a net annual cost impact of approximately $157,741 for the Mountain View-Los Altos Union High School District. This fiscal deficit is 0.54 percent of the District's current revenue limit.

Alternative 3 is projected to generate a net annual cost impact of approximately $86,040 for the Mountain View-Los Altos Union High School District. This fiscal deficit is 0.29 percent of the District's current revenue limit. No adverse impact is generated.

Alternative 4 is projected to generate a net annual cost impact of approximately $221,076 for the Mountain View-Los Altos Union High School District. This fiscal deficit is 0.75 percent of the District's current revenue limit.

Alternative 5 is projected to generate a net annual cost impact of approximately $215,101 for the Mountain View-Los Altos Union High School District. This fiscal deficit is 0.73 percent of the District's current revenue limit.

Mitigated Alternative 5, with the application of measure SOCIO-1b, is projected to generate a net annual cost impact of approximately $321,217 for the Mountain View-Los Altos Union High School District. This fiscal deficit is 1.09 percent of the District's current revenue limit.

As discussed above, these net cost impacts are based on highly conservative assumptions regarding additional property tax increment. Specifically, the analysis assumes that property values will remain stagnant and the District would not receive any funding from additional tax increment over the next 11 years (assuming a buildout of 2013). However, it is highly likely that property tax values will increase and return the District's per-student revenue limit funds to their current level. The District is an exception from the typical California public school finance system in that it is a State Basic Aid District. This fact indicates that it already has a higher per-student revenue limit than other high school districts and that it maintains a strong financial position. With these factors in mind, the analysis concludes that under Alternatives 2, 4 and 5, increases in costs for high schools could exceed the revenue limit by more than 0.5 percent, creating a significant impact. This would be true under the Mitigated Alternative 5 as well. NADP impact on the Mountain View-Los Altos Union High School District may be reviewed upon buildout of NADP and establishment of the actual number of high school students generated by on-site housing.

5. San Francisco Water Department and East Bay Municipal Utilities District

Existing ARC facilities receive potable water and fire protection supply from the San Francisco Water Department (SFWD). Approximately 85 percent of this water comes from the SFWD's Hetch Hetchy Reservoir, which gets about 15 percent of its water from East Bay Municipal Utility District (EBMUD) sources. According to SFWD and EBMUD officials, the fees collected for these services are calculated such that the systems pay for themselves, without subsidy from other revenue sources. The provision of these services to ARC after implementation of the NADP should not result in any net fiscal impact to the water service providers.

6. Sunnyvale Water Pollution Control Plant and Palo Alto Regional Water Quality Control Plant

Sewer service providers set their rate structure to assure that the services are fully paid for by users. Therefore, no net fiscal impact is anticipated.

7. Cumulative Impacts

As noted above, the cumulative projects identified in Chapter 2 are primarily employment-generating, with relatively few residential projects. One of the benefits of such projects for local governments is that they produce greater tax revenues than they do service demands and costs. Thus the cumulative projects analyzed in this EIS would have a net positive impact on local fiscal conditions.

D. Environmental Justice Impacts

Because none of the proposed alternatives for new development at Ames Research Center would include new uses with substantial direct noise or air quality impacts, the primary potential source of environmental justice issues would be the noise and air pollution associated with increases in automobile traffic and construction until new development under the NADP was completed. The environmental justice analysis in Section 3.14, analyzed the 15 census tracts that lie along Highway 101 within 5 kilometers (3 miles) of Ames Research Center for disproportionate impacts on minority and low income communities.

1. Minority Populations

Taken together, the 15 tracts within 5 kilometers (3 miles) of Ames Research Center have an ethnic breakdown almost identical to Santa Clara County as a whole. Of the census tracts that meet the HUD definition of minority communities, only five have a minority population substantially higher than the County average, while four have a minority population substantially smaller than the County average. All of these tracts would be affected similarly. Thus there would be no disproportionate affects on minority communities from traffic generated by the implementation of the NADP.

2. Low Income Populations

In terms of proportion of low-income households, the 15 census tracts have a rate of low- and very low-income households of 21.8 percent and 22.7 percent respectively. This is just under 5 percent higher than the Santa Clara County

average of 18.3 percent low income and 21.4 percent very low income, but would not be considered a significant difference. Thus there would be no disproportionate affects on low income populations in Santa Clara County from traffic generated by implementation of the NADP.

3. Berry Court and Orion Park Military Housing Areas

Because the Berry Court and Orion Park Military Housing areas are immediately adjacent to Ames Research Center, they would be the neighborhoods most heavily affected by any impacts from implementation of the NADP. It is thus appropriate to examine potential environmental justice impacts upon them in more detail.

Berry Court contains the only permanent residences in Census Tract 5047. The percentages of low income and minority populations living in Berry Court are lower than those in Santa Clara County as a whole, therefore Berry Court is neither a low income community nor a minority community, and impacts on Berry Court would not be considered environmental justice impacts.

Orion Park is located in Census Tract 5046.01, which has a low income population substantially higher than that in Santa Clara County as a whole. New construction in the Bay View area under Alternatives 2, 4 and 5 would lead to heavy truck traffic along R.T. Jones Road, which provides access to Orion Park. However, there would be no significant environmental justice impacts on Orion Park from these trucks for two reasons. First, there would be an average of approximately 45 to 60 trucks per day along R.T. Jones Road, which would not be a sufficient number to create significant congestion, noise, or air quality impacts. Second, this number of trucks would have little effect on Orion Park because only one residential building has back windows facing out onto R.T. Jones Road. The remainder of Orion Park is buffered from R.T. Jones Road by a wide expanse of open space.

Thus there would be no environmental justice impacts on the two military housing areas at Moffett Field.

4. Cumulative Impacts

Since the alternatives would not create any impacts whatsoever in regard to environmental justice, there would be no possibility for impacts from the NADP to combine with impacts from cumulative projects to create cumulative impacts in this regard.

E. Impacts and Mitigation Measures

This section summarizes significant impacts identified in Section B. None of the alternatives generates a significant fiscal impact on local jurisdictions or school districts, nor a significant impact with regard to environmental justice. Therefore no mitigation measures are necessary regarding these issues.

Impact SOCIO-1: Alternatives 2 through 5 would generate one percent or more of the new households in the Housing Impact Area between 2000 and 2015 and contribute to the regional jobs-housing imbalance.

Applicable to: Alternatives 2 through 5

Mitigation Measure SOCIO-1a: NASA will continue to attempt to acquire the rights to occupy as much of the Department of Defense (DOD) housing located at Moffett Field as possible to bolster the projected supply provided under each of the alternatives.

Mitigation Measure SOCIO-1b: In the Mitigated Alternative 5, NASA would require the provision of 1,120 townhome and apartment units in the Bay View area, and 810 student apartment and dormitory units in the NRP area. If this level of housing development could not be achieved, NASA would commensurately scale back the employment and student generating components of the project.

The provision of these units could have the potential to create secondary impacts in the areas of traffic, air quality, infrastructure, services, noise and

fiscal impact. These impacts are discussed in detail in Chapter 5. The analysis of these potential impacts concludes that there would be no significant impacts beyond those disclosed in the DPEIS. In fact, traffic impacts would be lessened. Infrastructure, service, and fiscal impacts would be mitigated through the payment of fair share contributions to sewer infrastructure and through Developer Impact Fees to offset impacts to schools, libraries and recreational programs in the City of Mountain View. Although residential uses in Building 20 would be within a 70dB noise exposure contour, this is considered conditionally acceptable by HUD and California Planning Guidelines, although not by Santa Clara County. Building 19 would be in a noise exposure area of 70 to 75 dB, which is above California Planning Guidelines conditionally acceptable levels, but is still conditionally acceptable to HUD. These noise impacts would be mitigated to less than significant levels.

Mitigation Measure SOCIO-1c: NASA would continue to evaluate the possibility of constructing housing above retail uses proposed in the NRP area.

Mitigation Measure SOCIO-1d: NASA would require at least 10 percent of the on-site housing to be affordable to low income households.

These four mitigation measures would not completely mitigate the impact. The Bay Area, and Santa Clara County in particular, has one of the most competitive housing markets in the nation. Housing demand far outstrips supply throughout the region, and the additional jobs generated by the NADP would contribute to the regional housing demand. Even with mitigation, the alternatives would generate workers who would not be housed on-site who would represent over one percent of the predicted new households in the Housing Impact Area through 2015. Hence, this impact would be significant and unavoidable.

Impact SOCIO-2: Alternative 3 would generate a net negative fiscal impact on the City of Mountain View, due in particular to increased demands on recreational and library facilities.

Applicable to: Alternative 3

Mitigation Measure SOCIO-2: NASA, in collaboration with its Partners, would provide on-site library and recreation facilities. These would include community rooms within the residential portions of the project, an on-site fitness center, and reading rooms and libraries as part of the University-related uses.

Impact SOCIO-3: Under Alternatives 2, 4, 5, and Mitigated Alternative 5, increases in costs generated by ARC high-school students could exceed 0.5 percent of the Mountain View-Los Altos Union High School District annual revenue limit.

Applicable to: Alternatives 2, 4, 5 and Mitigated Alternative 5

Mitigation Measure SOCIO-3: NASA and the Mountain View-Los Altos Union High School District will negotiate an agreement whereby in any given year, should the Mountain View-Los Altos Union High School District's per student operating revenues decrease below a pre-determined baseline as a direct result of enrollment generated by the NADP, NASA or its partners will compensate the District for the shortfall associated with these students. The baseline would be set to the District's per student operating revenues in the year prior to when students residing at ARC first begin attending classes in the District, and would be adjusted for cost of living and inflationary changes over time.